## The Voynich Manuscript Revisited1

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#### Unclassified

In what appears to be an important literary and linguistic discovery, the author begins to remove the veil from "the most mysterious manuscript in the world," the Voynich Manuscript. This brief, tentative, study claims that the Voynich Manuscript does not contain an artificial language nor the enciphered text of an underlying text in an unknown language, but is a text in a hitherto unknown medieval North Germanic dialect.

The Voynich Manuscript, an object of interest off and on since the seventeenth century, contains over 200 pages written in a partially cursive alphabet which has proved indecipherable. Equally enigmatic are the large number of drawings—of plants, few of which are identifiable, and of naked women sitting in tubs or emerging from pipes (one writer has called the latter a "plumber's nightmare").

The history of the manuscript, which has been detailed in other places, needs only passing mention, since it does not throw any light on the content. Dating from about 1500, it was said by Joannes Marci, mathematician and orientalist at the University of Prague, to have belonged at one time to Emperor Rudolf II (1576-1612). Marci writes in 1666 to the Jesuit Athanasius Kircher, in Rome, that he was making a present to the latter of the manuscript, the author of which, he had heard from another source, was the great medieval scholar Roger Bacon. (How Marci came into possession of it, I do not know.)

Marci himself withheld judgment on the attribution, but at least one scholar since his time became intrigued with the notion of Baconian authorship. Professor William Newbold of the University of Pennsylvania was convinced that it was an enciphered text prepared by Bacon and he worked on this assumption from 1919 until his death in 1926. He thought he had deciphered some of it, including an occurrence of "R Baconi" on the last page<sup>2</sup>. His solution has been convincingly refuted by other scholars, who, however, have not offered anything better.

I now rush in where angels fear to tread. Although not a specialist in Old Norse, I am convinced that the manuscript is a text in a

<sup>&</sup>lt;sup>1</sup>The original version of this paper was received in the *Cryptolog* editorial office 16 February 1976 and was published in the April 1976 issue of that periodical. The present text is a revised version based on further study.

<sup>&</sup>lt;sup>2</sup>The information in this paragraph and the preceding paragraph was taken from *Horizon*, Vol. V, No. 3 (January 1963).

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medieval North Germanic dialect hitherto unknown, at least insofar as the script is concerned. It is not a cipher, and not an artificial language, as has also been suggested. The distribution of vowel and consonant letters, some of which are surely Latin letters, makes a cipher improbable. As for the possibility of its being an artificial language, the linguistic features suggesting a Germanic affiliation render that hypothesis unnecessary.

Most of the manuscript has a depressing number of repeated words and phrases, of little help unless collateral information is available, suggesting that these are prayers, incantations, or formulas of a specific character. This is not the case, unfortunately. I finally chose a mostly unadorned text without too many repeats (Folio 114 recto) to begin with, and a botanical folio (Folio 40 verso) as a follow-up.

I then attempted to find "function" words, that is, connecting words such as conjunctions, personal pronouns, and prepositions, assuming (correctly, as it turned out) that the language would have these. The first item that caught my eye was o  $\mathcal L$ , the second letter of which was a mystery. However, I thought the word might be "and" because of its frequent position between longer words which often had the same endings. Remembering og, "and," from Danish, I sought out phrases of the type "of mice and men" (Scandinavian literature, like that of Anglo-Saxon, contains many rhyming or alliterative phrases of this type). I was lucky; a phrase in the script form

occurred. The first is a general Scandinavian word for "from," "out of." This was promising, because not only did the first word appear to be in a known alphabet with the desired meaning, but the second letter of the second word was a tentative recovery ("g"). The same procedure has been of aid in the tentative recovery of proper names, especially those occurring in pairs:

# Kor of KNKin Thorog Thruther "Thor and his daughter | Thruther."

Once a few phrases of this kind fall into place, the next logical step is to look for verb forms, and hope that verb affixes and bases of the desired type appear. Again, I was fortunate in finding verbal suffixes and a few high-frequency verbs common in Scandinavian languages: the vowel frequently appears as a suffix on bases which look like high-frequency verbs in North Germanic: rid-a, "ride"; rjod-a, "turn red"; bair-a, "bear."

The process of trial and error in recovering the letters, which are in some cases digraphs, in the words above was too lengthy for me to

detail here, but I am quite sure of their correctness. Further, the suffix -a seems to have, according to different syntactic patterns, both third-person plural present-tense and infinitive values, which supports a North Germanic identification. Another suffix, -a, seems to be a third-person plural past-tense  $\overline{a}$  similar to the -u (-a) of other Scandinavian languages. If I am correct on this point, the manuscript a which I have transliterated as "g," stands for a spirant rather than a stop, and could as well have been rendered "gh" or "h." In this case, the letter could, and I believe did, serve double duty as a consonant and an indicator of vowel length.

From the above it will be clear that this is only a beginning. Spelling "variants" in the manuscript sometimes turn out to be different words and in any case cause difficulties (variant spellings of the same word are common, however, in manuscripts of most Germanic languages, and are not in themselves unexpected). The "letters" themselves are not all recovered, especially those symbols which appear in final position only and which are certainly digraphs in some cases. The inventory of recoveries which are either likely or virtually assured comes to about 15, too few to give a picture of the phonemic structure of most languages. However, several of them must, on etymological grounds, represent two values: \$\mathbf{f}\$ for example, stands for both the stop d and the spirant \$\mathbf{d}\$, while \$\mathbf{H}\$ may represent the stop t and the spirant \$th\$.

The paucity of identified phonemes need not in itself be a barrier to progress. In Folio 40 verso, a botanical text, judging from the illustrations, I have sufficient values to establish phrase length segments, e.g.,

gotto lida dagor, lit.: "having gotten to pass days," i.e., "with the passage of days"; tho ir lida tida... "when the time has come..."

I have also made tentative recoveries for at least two clauses both of which seem to relate to the flowering of the plant pictured in the folio, but it would be premature to offer a translation.

Obviously a great deal of work lies ahead for myself and others who may wish to pursue the subject. Modern theories of syntax which properly focus on verb-noun relationships in context have made it possible for me to avoid preoccupation with single morphemes. These theories can be of substantial aid to further research.

The single most valuable source for my work has been An Icelandic-English Dictionary (Cleasby et al.) which, while out of date in some ways, offers hosts of phrase- and clause-length examples from the literary monuments of Icelandic. Interestingly enough, this is true in spite of the fact that the dialect in question is quite different from Old Icelandic. Naturally, with additional insights from further study. DOCID: 636899

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#### **VOYNICH REVISITED**

I will be able to make increasing use not only of other linguistic sources but also of anthropological materials.

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